



# UNITED STATES PATENT AND TRADEMARK OFFICE

SD

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,472	03/29/2001	Michael Eder	449122002000	4686
7590	08/09/2005		EXAMINER	
Morrison & Foerster 2000 Pennsylvania Avenue NW Washington, DC 20006-1888			ZHEN, LI B	
			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/762,472	EDER ET AL.	
	Examiner Li B. Zhen	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10 May 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/10/05.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1 – 11 are pending in the application.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1 – 5 and 7 – 11 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Statutory Invention Registration No. H1,918 to Hoffpauir et al. [hereinafter Hoffpauir].**

4. As to claim 1, Hoffpauir teaches a method for operating a terminal unit in an exchange [telecommunications system 14, Fig. 2; col. 9, lines 25 – 50], in which signaling for a first subscriber is carried out during execution of a first application program [signaling application 56 provides the logic needed to provide signaling functionality; col. 13, lines 35 – 60 and col. 6, lines 4 - 18] by a processor [call processor 40 may be implemented using a dedicated computer, such as a personal computer motherboard using an Intel Pentium microprocessor; col. 10, lines 17 – 46] included in the terminal unit [call processor] wherein call processing between the first subscriber

and a second subscriber is carried out during execution of a second application program [call processing application 54 includes various software objects...the BSC 50 is responsible for management of the BTSs 20 and their radio interfaces with subscriber units 22, including the allocation and release of radio channels; col. 14, lines 37 – 57; col. 13, lines 55 – 60; col. 14, line 58 – col. 15, line 2], wherein signaling data [col. 19, line 1 – 25], generated during signaling, at a message interface [resource manager application 58 also provides an interface to resources of the resource assembly 60 for the signaling application 56 as well as other elements, such as the system controller application 94 and various elements of the NMS-S 70; col. 13, line 60 – col. 14, line 36] are transferred to the second application program [assembly 60 with respect to the call processor 40 and enables different applications of the call processor 40 to interface with resources of the resource assembly 60; col. 13, line 60 – col. 14, line 36] by using an operating system for controlling the flow of the application programs [call processor 40 may also operate under the control of an operating system capable of processing real-time data; col. 10, lines 17 – 46],

and wherein call data, generated during call processing [call processing application 54; col. 14, lines 37 – 57], at the message interface [resource manager application 58; col. 14, lines 37 – 57] are transferred to the first application program using the operating system [col. 10, lines 17 – 46].

5. As to claim 2, Hoffpauir teaches a method for operating terminal unit in an exchange [col. 9, lines 25 – 50], in which signaling is carried out with the aid of a further

exchange by processor included in the terminal unit [col. 16, line 55 – col. 17, line 5 and col. 17, lines 30 – 38] during execution of a first application program [signaling application 56 provides the logic needed to provide signaling functionality; col. 13, lines 35 – 60 and col. 6, lines 4 - 18], wherein call processing between the two exchanges is carried out during execution of a second application program [call processing application 54 includes various software objects; col. 14, lines 37 – 57; col. 13, lines 55 – 60; col. 14, line 58 – col. 15, line 2], wherein signaling data [col. 19, line 1 – 25], generated during signaling, at a message interface [resource manager application 58; col. 13, line 60 – col. 14, line 36] are transferred to the second application program [col. 13, line 60 – col. 14, line 36] by using an operating system for controlling the flow of the application programs [col. 10, lines 17 – 46],

and wherein call data, generated during call processing [call processing application 54; col. 14, lines 37 – 57], the message interface [resource manager application 58; col. 14, lines 37 – 57] are transferred to the first application program using operating system [col. 10, lines 17 – 46].

6. As to claim 3, Hoffpauir teaches the generated signaling data or the call data include messages with a prescribed structure [carry data in a predetermined format, such as an E1 data format; col. 17, line 60 – col. 18, line 9].

7. As to claim 4, Hoffpauir teaches the messages include receiver identifier [name of the receiver software object; col. 10, lines 47 – 57], or an address reference on a data

block with data to be transmitted, or a message identifier for distinguishing the different messages, or a message type identifier for identifying the type of message, or data on the application program generating the message.

8. As to claim 5, Hoffpauir teaches at least one of the signaling data and the call data include a data block, and wherein, in addition to data to be transmitted, the data block includes further data with the aid of which the data block can be assigned to one more application programs [and signaling information may be exchanged and is controlled and monitored by the call processor 54; col. 16, line 55 – col. 17, line 5].

9. As to claim 7, Hoffpauir teaches two second application programs with identical different command sequences are used [call processing application 54 includes various software objects; col. 14, lines 37 – 57], wherein the application program exchanges at least one of signaling data and call data with the second application programs via a common or a plurality of message interfaces [BSC 50 is responsible for management of the BTSs 20 and their radio interfaces with subscriber units 22; col. 14, lines 37 – 57], and wherein the same command sequence used in the case of second application programs with identical command sequences [col. 14, lines 5 – 57].

10. As to claims 8 and 11, Hoffpauir teaches a terminal [call processor; col. 10, lines 17 – 46] for an exchange [telecommunications system 14, Fig. 2; col. 9, lines 25 – 50], having,

Art Unit: 2194

at least one subscriber line [telecommunications lines; col. 17, lines 57 – 67] for connecting a first subscriber [subscriber unit 22; col. 4, lines 43 – 54];

at least further connection for setting up a transmission channel to a second subscriber [one or more of the BTSSs 20 and subscriber units 22, a wireless telecommunications switch that may generally be defined to include the remaining components; col. 5, lines 5 – 23];

application programs for executing switching operations, to which signaling at the subscriber line and method steps for call processing belong [switching module 64 may be implemented in software; col. 17, lines 5 – 39], wherein signaling data generated during signaling is used when processing a call, or call data generated during call processing is used when signaling [col. 19, line 1 – 25]; and

an operating system controlling the flow of the application programs [col. 10, lines 17 – 46], wherein at least one of the signaling data and the call data [col. 14, lines 37 – 57] are transferred to at least one message interface [resource manager application 58; col. 14, lines 37 – 57] by using the operating system [col. 10, lines 17 – 46].

11. As to claim 9, Hoffpauir teaches a terminal [call processor; col. 10, lines 17 – 46] for an exchange [telecommunications system 14, Fig. 2; col. 9, lines 25 – 50], comprising:

at least one further connection for connecting a further exchange [one or more of the BTSSs 20 and subscriber units 22, a wireless telecommunications switch that may

generally be defined to include the remaining components; col. 5, lines 5 – 23; col. 9, lines 25 – 50];

application programs for executing switching operations, to which signaling at the subscriber line and method steps for call processing belong [switching module 64 may be implemented in software; col. 17, lines 5 – 39], wherein signaling data generated during signaling is used when processing a call, or call data generated during call processing is used when signaling [col. 19, line 1 – 25]; and

an operating system controlling the flow of the application programs [col. 10, lines 17 – 46], wherein at least one of signaling data and the call data [col. 14, lines 37 – 57] are transferred to at least one message interface [resource manager application 58; col. 14, lines 37 – 57] using the operating system [col. 10, lines 17 – 46].

12. As to claim 10, Hoffpauir teaches signaling is executed by a first application program [signaling application 56 provides the logic needed to provide signaling functionality; col. 13, lines 35 – 60], and wherein call processing is executed by a second application program [call processing application 54 includes various software objects...the BSC 50 is responsible for management of the BTSs 20 and their radio interfaces with subscriber units 22, including the allocation and release of radio channels; col. 14, lines 37 – 57].

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffpauir in view of U.S. Patent No. 6,516,355 to Hartmann et al. [hereinafter Hartmann].**

15. As to claim 6, Hoffpauir the first application programs exchange at least one signaling data and call data with second application programs via a common or a plurality of message interfaces [BSC 50 is responsible for management of the BTSs 20 and their radio interfaces with subscriber units 22; col. 14, lines 37 – 57] and wherein that same command sequence executed during processing the second application programs [col. 14, lines 5 – 57]. Hoffpauir does not specifically teach support for different protocols.

However, Hartmann teaches two first application programs are used for signaling with the aid of different protocols [switching engines according to the invention all communicate with a generic message protocol of the invention and each switching engine communicates with a particular brand of digital switch; col. 5, line 65 – col. 6, line 19].

16. It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of application programs for signaling with the aid of

different protocols as taught by Hartmann to the invention of Hoffpauir because this provides a generic API for controlling a digital switch and a number of switching engines for controlling different switches [col. 9, lines 58 – 63 of Hartmann].

***Response to Arguments***

17. Applicant's arguments filed May 10, 2005 have been fully considered but they are not persuasive. In response to the Non-Final Office Action dated February 10, 2005, application argues:

- (1) Hoffpauir does not teach exchange of signaling and call data between two subscribers [p. 6, lines 4 – 13]; and
- (2) Hoffpauir does not teach two exchanges of application programs for signaling and data processing by means of a processor and an operation system [p. 6, lines 14 – 26].

In response to argument (1), examiner respectfully disagrees and notes that Hoffpauir teaches all the features in argument (1). Hoffpauir teaches the MSC 48 is primarily responsible for mobility management, call control and trunking, such as coordinating the setting-up and termination of calls to and from the subscriber units 22 [col. 14, line 58 – col. 15, line 2]. The MSC 48, which is part of the call processing application 54 [col. 13, lines 55 – 60] provides call processing between subscriber units [coordinating the setting-up and termination of calls to and from the subscriber units 22], therefore, call processing application 54 exchange call data between subscribers. In addition, Hoffpauir teaches the signaling application provides the logic needed to

provide signaling functionality provided as SS7 signaling to provide SS7 connectivity to the PLMN 16 and the PSTN 18 [col. 13, lines 35 – 60] and the MSC 24 interfaces with external networks such as the PLMN 16 and the PSTN 18 so that mobile subscribers, such as subscriber unit 22, can communicate with others outside of the traditional wireless telecommunications system 12 [col. 6, lines 4 – 18]. The PLMN and PSTN are external networks that also include subscribers.

As to argument (2), examiner respectfully disagrees and submits that Hoffpauir teaches exchanges of application programs for signaling [col. 13, lines 35 – 60 and col. 6, lines 4 – 18] and data processing [col. 14, line 58 – col. 15, line 2 and col. 13, lines 55 – 60] by means of a processor [col. 10, lines 17 – 46] and an operating system [col. 10, lines 17 – 46].

### ***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2194

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

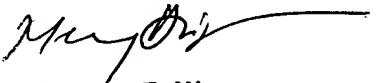
19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen  
Examiner  
Art Unit 2194

Ibz

  
MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER